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INFORMATION, DATA AND DISCUSSIONS IN

SUPPORT OF THE SOUTHERN CALIFORNIA TRIBAL

CHAIRMEN'S ASSOCIATION (SCTCA'S) DECISION PROCESS FOR ESTABLISHING A TRIBAL ENERGY

Gray Davis, Governor

#### **CALIFORNIA ENERGY** COMMISSION

Prepared By:
The Heritage Institute
Englewood. Colorado
on behalf of The Southern California
Tribal Chairmen's Association.
Vallev Center California
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Prepared For:

Mary Ann Miller,

Grant Manager

Linda Kelly,

Project Manager

Karen Griffin,

Manager

**ELECTRICITY ANALYSIS OFFICE** 

Karen Griffin

Acting Deputy Director

**ENERGY INFORMATION AND ANALYSIS DIVISION** 

Steve Larson,

Executive Director

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# **The Current Energy Situation**

Southern California s energy situation can be generally characterized by the following:

*High Cost of Service* — Electric customers of San Diego Gas & Electric (SDG&E) and Southern California Edison (SCE) have historically experienced some of the highest rates in the country, as illustrated by **Table 1**. For customers in SDG&E s service territory who are no longer protected by a rate freeze, volatile prices resulting from statewide power shortages have doubled and tripled their electric bills in recent months.

Strained Electricity Availability — Today, California finds itself with inadequate generating capacity during periods of peak demand, which corresponds to hot summer days when people are using their air conditioners. Generation reserves in California, as well as the rest of the West, have been consistently declining since 1993. The electric system in the region needs major generating capacity additions to provide adequate reserve margins, particularly in light of projected energy and demand growth.<sup>1</sup>

Regulatory Uncertainty — AB 1890 (discussed below) mandated that electricity markets in California be deregulated. Prior to passage of AB 1890, uncertainty created by the debate about restructuring in the latter part of the 1990 s contributed to the lack of investment in new power plants or transmission lines. This summer when rates in California soared, the Independent System Operator (ISO) Board of Directors voted to reduce rate caps for wholesale energy from \$750 to \$250 MWh. The Federal Energy Regulatory Commission (FERC) later approved the reduction. For power plant developers who bear the financial risk of building a merchant plant in California, these uncertainties made investment decisions more difficult. Recent electricity price volatility and the availability of power during peak conditions have underscored the tenuousness of the electric power grid in California. It remains to be seen how newly proposed policy/legislative measures will stabilize or reverse California s electricity deregulation process set forth by AB 1890.

New Choices/New Players — The State s deregulation process enables electric customers to choose their electricity provider based on cost of service and other criteria; deregulation has also opened up the electric supply market to new energy service providers (ESPs) other than traditional regulated utilities. **Table 2** provides a summary of competing residential electric rate plans and features offered by approved ESPs to individual accounts (rates are likely to be more favorable to multiple accounts). ESPs also offer competing electric rate plans for commercial accounts. Thus far, rate savings offered by new entrants have been nominal compared to electric rates offered by traditional service providers.

<sup>&</sup>lt;sup>1</sup>According to the California Energy Commission (Energy Commission) report *California Energy Demand* 2000-2010, electricity consumption in the SDG&E and SCE service territories is expected to grow annually between now and 2010 at a rate of 2.2 percent and 2.1 percent respectively, compared to the statewide growth estimate of 2.0° percent. The Energy Commission also estimates that SDG&E and SCE will both experience peak demand growth of about 1.5 percent per year through 2010, compared to 1.4 percent for the entire state. This implies that the SDG&E and SCE systems will need over 1000 MW and 4000 MW respectively of new generating capacity in the next ten years to meet projected loads.

Table 1. Comparative Electric Rates for Southern California										
	Residential		Commercial		Industrial					
	\$/kWh	Vs. National Average	\$/kWh	Vs. National Average	\$/kWh	Vs. National Average				
San Diego Gas & Electric	0.168	+113%	0.174/0.135	+124%	0.150	+257+				
Southern California Edison	0.116	+49%	0.112/0.091	+47%	0.086	+105%				
State-wide Average	0.120	+52%	0.130/0.104	+70%	0.097	+131%				
National Average	0.079	NA	0.069	NA	0.042	NA				

 $\$  which values for commercial are small commercial (< 20 kW)/medium commercial (>20 kW). Sources: California Energy Commission estimates (September 2000) & US EIA s *Monthly Report* (through May 2000)

Table 2												
Residential Service Plans and Rates for Utilities and ESPs												
			In SDG&E Territory			In SCE Territory						
			Rates in \$/kWh		Rates in \$/kWh Sample Bill Rates in \$/kWh		n \$/kWh	Sample Bill				
	Service Plan	Green	Baseline	Non- Baseline	500 kWh	Baseline	Non- Baseline	500 kWh				
Traditional Utilities												
SDG&E	Schedule DR	No	0.088	0.108	\$49.10	NA	NA	NA				
SCE	Schedule D	No	NA	NA	NA	0.108	0.127	\$59.32				
New ESPs												
ACN Energy	100% Renew.	Yes	0.097	0.117	\$56.59	0.117	0.136	\$66.81				
Ancor LLC	Standard	No	0.092	0.112	\$51.35	0.112	0.131	\$61.57				
Clean Earth Energy	100% Renew.	Yes	0.085	0.106	\$48.05	0.105	0.125	\$58.27				
Cleen n Green	100% Renew.	Yes	0.087	0.107	\$48.97	0.107	0.127	\$59.19				
Commonwealth Energy	100% Renew.	Yes	0.086	0.106	\$48.35	0.106	0.125	\$58.57				
Green Mountain Energy	100% Renew.	Yes	0.088	0.108	\$55.05	0.108	0.127	\$65.27				
PG&E Energy Services	100% Renew.	Yes	0.105	0.125	\$60.82	0.125	0.144	\$71.04				
Power Source	100% Renew.	Yes	0.108	0.128	\$61.10	0.128	0.147	\$71.32				
Tenderland Power	100% Renew.	Yes	0.088	0.108	\$52.09	0.108	0.129	\$63.12				
Utility.com	100% Renew.	Yes	0.082	0.102	\$46.10	0.102	0.121	\$56.32				

Source: California Public Utilities Commission (CPUC), March 2000

The energy situation (which directly impacts economic and community development) for Tribes in Southern California can be characterized by the following:

**High Cost of Service** — In aggregate, Tribal electricity accounts in Southern California pay slightly higher electricity rates than the rest of the region. This is due, in part, to the remoteness of and thinly loaded (low customer density) nature of distribution lines in some Tribal communities.<sup>2</sup>

*Energy Intensive Operations* — Several Southern California Tribes operate gaming operations and resorts that are major contributors to the economic vitality of their communities. These facilities are very energy and cost intensive to operate, and are highly affected by electricity price spikes and power curtailments.

*Electric Demand Growth* — Several Southern California Tribes are planning the development new gaming operations/resorts and other businesses. The economic performance of new Tribal development projects will also be affected by future electricity prices and power availability, and they will place sizable new loads onto an already strained electric system.

**Need for Electrification** — The electric distribution network is underdeveloped or non-existent on the lands of a few Southern California Tribes. Lack of adequate electric service hinders local economic development efforts by these Tribes and inhibits the development of basic housing for their members.

# California Utility Restructuring: Legislation, Impacts, And Recent Actions

#### Legislation

**AB 1890** — California s restructuring law, Assembly Bill 1890 (AB 1890 — Statutes of 1996, Chapter 854) dramatically changes the market system that has been in place for more than eighty years for serving the electricity needs of California s homes, businesses, industry and farms.

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<sup>&</sup>lt;sup>2</sup> According to the US Department of Energy s report *Energy Consumption and Renewable Energy Potential on Indian Lands*, the California-Nevada subregion of the North American Electric Reliability Council has the third highest cost of electricity for residential users (\$0.103 per kWh). Within the CNV subregion Indian households pay an average of \$0.106. According to the report, the Agua Caliente, Cabazon, Cahuilla (SCTCA Tribe), Morongo, Pechanga, Santa Rosa, and Soboba reservations pay some of the highest rates in the country, \$0.131 per kWh.

The legislation established the Legislature s intent to:

- Ensure that California s transition to a more competitive electricity market structure allows its citizens and businesses to achieve the economic benefits of industry restructuring at the earliest possible date.
- Create a new market structure that provides competitive, low-cost and reliable electric service.
- Provide assurances that electric customers in the new market will have sufficient information and protections.
- Preserve California s commitment to developing diverse, environmentally sensitive electricity resources.

To meet these objectives, AB 1890 provides for the following:

- Accelerated recovery of transition costs associated with uneconomic utility investments and contractual obligations. These costs are collected via a surcharge on all electricity consumers bills, also referred to as a competitive transition charge.
- A new market structure featuring two state-chartered, nonprofit market institutions: the Power Exchange (PX) which is charged with providing an efficient, competitive auction to meet electricity loads of exchange customers, open on a nondiscriminatory basis to all electricity providers; and an Independent System Operator (ISO) which is given centralized control of the investor-owned utilities transmission grid and charged with ensuring the efficient use and reliable operation of the transmission system.
- Specific funding for public interest programs that develop existing, new and emerging renewable resource technologies, energy efficiency and conservation activities, and public interest research and development.
- A transition period beginning in 1998 and extending through the end of 2001. This time would allow customers needed compensation for assets they paid for through regulated rates, utilities time to renegotiate uneconomic purchased power contracts, utility share holders the opportunity to recover outstanding obligations on uneconomic generation assets, and policy makers time to establish new funding, goals and oversight structures for all these new programs and market activities.

#### **Impacts and Accomplishments**

In response to AB 1890, the following has occurred:

- Pacific Gas and Electric (PG&E), SCE, and SDG&E have sold nearly all their thermal power plants to independent power producers.
- The role of PG&E, SCE and SDG&E has now changed. These utilities are now referred to as Utility Distribution Companies (UDC) because their primary responsibility is to

move electricity through a service area to their customers. They may also provide metering and billing services if the customer wishes. The UDC is still required to purchase electricity from the Power Exchange for any customers who do not elect to buy power from an Electric Service Provider.

- The Independent System Operator has become responsible for operation of 70 percent of the high voltage electricity transmission system in California. It has assumed responsibility for ensuring fair and impartial access to the transmission system for all generators, while maintaining reliability.
- The new Power Exchange (PX) conducts a daily public auction in which demand for power is matched with available generation from all over the western region. The price of electricity is determined in this statewide transparent spot market.
- IOU ratepayers are no longer financially responsible for the costs associated with the building of new power plants. Power plants will be built by investors and developers who are willing to assume full financial responsibility for the plant.
- Residential and small commercial customers can buy power from ESPs or opt to maintain service with their current utility, the default provider. If they chose to buy from an ESP, the rate they pay for their energy will reflect the price negotiated with the ESP. The market price charged by the default utility may be lower or higher than the price the ESP charges its customers.

#### **Recent Actions**

The Energy Commission has approved 5 applications for 3,648 MWs and is reviewing 14 applications to build power plants in California. The combined generating capacity of these applications exceeds 8000 MWs. This additional generation capacity, combined with new facilities in the other western states, will create a more competitive electricity market in a few years.

The Governor's administration and FERC are concerned about whether the wholesale market is competitive and producing reasonable prices. After completing investigations, further actions addressing this matter are anticipated this winter.

The California Legislature recently passed and Governor Davis signed two important bills, AB 970 and SB 265. Two of the principal features of AB 970 are:

- The allocation of \$50 million to the Energy Commission to implement cost-effective energy conservation and demand-side management programs to reduce peak electricity demand and improve energy efficiency.
- A second key feature is the creation of an expedited siting process for power plant projects. Projects will be eligible for this expedited process if, on the basis of an initial

review, the Energy Commission concludes there is substantial evidence that the project will not cause a significant adverse impact on the environment or electrical system, and will comply with all applicable laws.

AB 265 requires, among other things, the CPUC to establish a ceiling on the energy component of electric bills for San Diego residential and small commercial customers through December 31, 2002, retroactive to June 1, 2000. This rate cap will protect San Diego ratepayers who are suffering as a result of current high-energy prices.

These actions are only the first steps necessary to address a spectrum of problems that are plaguing the newly restructured California market. These problems include continued load growth in excess of UDC predictions, generator-bidding behavior, and market structure. The Governor, and both state and federal government agencies are investigating these problems and looking for ways to improve the operation of the California market. They will also be looking to improve the choices consumers have, as well as the tools they need in order to successfully adapt to competitive energy markets. The ISO is implementing changes to the market structure and behavior rules. The CPUC and FERC are also investigating allegations that generators manipulated prices to their advantage during this past summer.

## The Energy Cooperative Concept

Providing benefits to individual Tribes from inter-Tribal collaboration have been a hallmark of SCTCA since its inception. Providing benefits to individual electricity consumers through collaboration has been a hallmark of local electric cooperatives and the National Rural Electric Cooperatives Association since their inceptions. SCTCA member Tribes may benefit from forming a cooperative-style business entity to pursue energy-related opportunities for the following reasons:

*Increased Political Leverage* — An energy cooperative of two or more (or all 19) Tribes would provide SCTCA member Tribes with a louder, more unified voice on regional, State, and Federal energy issues.

Increased Market Leverage —A Tribal energy cooperative would be able to aggregate individual Tribal energy loads (electricity, natural gas, propane, etc.) together, creating sufficient leverage to achieve a reduction of energy rates from current energy providers or to illicit lower cost bids for the new breed of energy service providers in the State. Further, a Tribal energy cooperative can leverage its size and buying power to purchase energy equipment (e.g. energy efficient lighting equipment, distributed generation equipment, etc.), and other energy-related items in bulk.

Control of the Delivery of Traditional Energy Services — A Tribal energy cooperative can pursue a broad range of energy-related business opportunities in areas previously restricted to regulated and franchised utilities, including ownership, operation, and maintenance of centralized power generation and localized energy distribution system assets.

Control of the Delivery of New Programs and Services — Regardless of whether it s a participant in bulk generation and distribution of energy, a Tribal energy cooperative can provide services to its members that are often not available (or available at a reasonable price) through current providers, including energy audits, energy-efficient appliances, propane, satellite TV, internet connection, natural gas, or other products or services as determined by members.

Control of the Type of Electricity Generated or Used—Based on environmental and economic considerations, a Tribal energy cooperative could include or preclude certain power technologies and fuels from its portfolio of preferred power generation sources so as to positively impact regional environmental conditions and, perhaps, encourage the development of sustainable power development on Indian lands (e.g. low head hydropower, wind farm development, natural-gas fired merchant power, etc.).

## **Examples of New Energy Cooperatives**

#### California

California Electrical Users Cooperative (CEUC) — CEUC formed in November of 1997. It is an aggregation of 17 agricultural cooperatives and their members. The cooperative has 3,000 meters using approximately 120 megawatts of electricity that is purchased through a direct access agreement with New West Energy, an electric service provider. The organization has a three-year contract with a 3 percent rebate off the total electric bill. The CEUC is currently involved in a strategic planning process that will result in a long-term arrangement to provide electric service to its members. The cooperative is looking at building its own generation, as well as purchasing power directly from the market for its members.

California Oil Producers Electric Cooperative — COPEC was formed in the summer of 1999. COPE made an aggregated purchase of electricity with savings based on a sliding scale and a load factor for a portion of its membership. Also, COPE has worked with its membership to reduce total electrical usage through demand-side management. Recently, COPE was successful in securing for its members \$4 million from the CPUC s Energy Conservation Grant Program. COPE represents 25 members purchasing 100 megawatts of electricity through direct access.

Northern Sierra Service Cooperative — NSSC was formed in June of 2000. This cooperative is scheduled to become operative in December of 2000 and will provide accounting, billing, metering and other administrative services as requested by its members.

Clean Power Cooperative — CPC was formed in August of 2000. It will become operational in the later part of the year 2000. Its purpose is to provide electric energy and related services to its members in a manner that will enable them to reduce the environmental harm caused by energy use, and to facilitate clean sustainable sources of electrical energy that minimize impacts on the environment.

Golden State Power Cooperative — GSPC was formed in February of 20000 as an umbrella cooperative intended to represent electric customers who purchase as aggregated loads. Current members are the California Electric Users Cooperative (CEUC), the California Oil Producers Electrical Cooperative (COPE) and Plumas-Sierra Rural Electrical Cooperative (PSREC). Primary support services include coordination of member efforts in legislative, regulatory and cooperative development activities.

#### **Outside of California**

1<sup>st</sup> Rochdale Cooperative, New York City — This was the first cooperative formed to empower residential consumers in an established urban market as a response to electric utility restructuring. It is an aggregation co-op primarily serving housing cooperatives in New York City. In addition to aggregating electricity service, it also provides energy efficiency audits, satellite television, heating oil services, and is developing demonstration projects for distributed generation. Established in 1997, 1<sup>st</sup> Rochdale made its first electric sales in April 1999.

#### 1<sup>st</sup> Rochdale s mission is to:

- Lower members total energy bills through comprehensive energy management;
- Develop energy conservation and generation strategies, and renewable energy sources.

Even before it began to supply electricity, 1<sup>st</sup> Rochdale undertook intensive energy analyses for its major residential and commercial accounts, acting in accordance with its philosophy of comprehensive energy management and alternative generation strategies.

The initial organizing efforts started within the housing cooperatives in New York City, the largest concentration of housing cooperatives of any metropolitan area. The housing cooperative leaders were already familiar with cooperative principles and were extremely valuable in making the efforts a success.

1<sup>st</sup> Rochdale had several cooperative partners in its development efforts. Among these were North Carolina Electric Membership Corp., National Rural Electric Cooperative Association, National Rural Telecommunications Cooperative and the National Rural Utilities Cooperative Finance Corporation.

By partnering with established electric cooperatives, which have extensive expertise in customer service and in supplying electricity, 1<sup>st</sup> Rochdale offers a unique combination of organizational capabilities to its members. Because it is consumer-owned, it has a greater understanding of its consumers than other electric companies.

The Center for Neighborhood Technology (CNT), Chicago, Illinois — As part of this three-year pilot project, the CNT Co-op will work with Illinois residential, industrial and commercial energy customers in the first initiative of its kind designed to help improve

reliability by changing behavior and energy-use patterns in communities. The immediate goals of the Co-op are to improve energy reliability, lower customers costs, reduce energy waste and pollution, and earn money for community development initiatives. To accomplish these goals, the Energy Cooperative will use a combination of high-tech and common sense approaches to help customers be more energy efficient. Initially the Co-op will target pilot communities in the six-county Chicago metropolitan region where energy demand is growing and could eventually exceed the current capacity to supply it.

Commonwealth Edison (ComEd) will invest \$14.7 million in start up funds over three years in the Energy Cooperative. ComEd will pay the Co-op for reducing its members demand for energy according to a formula directly tied to energy use. ComEd and CNT are presently negotiating the details of that contract. The Co-op will distribute cash energy reduction payments to its members or subsidize the purchase of energy efficient equipment or on-site generators for their homes or businesses. A portion of all energy reduction revenues will be paid into a fund set up by the Co-op to support community development in areas where it is operating, and a small portion will support the Co-op s operational expenses.

By reducing their demand, members participating in the Co-op s programs could save money on their energy bills. Annual savings could total as much as \$100 for residential members. Mid-size commercial and industrial members participating in Co-op load management programs could earn \$12,000 to \$20,000 per year.

Why would a utility that profits through the sale of electricity want to help the Co-op curtail consumption? The answer is threefold: first, the Co-op will improve ComEd s reliability by reducing demand on growing parts of the Com Ed system; second, the Co-op will allow for more efficient investments in the distribution system; third, ComEd will avoid expensive energy purchases.

To accomplish its goals, the Co-op will provide to its commercial and industrial members free energy efficiency audits, and design voluntary load reduction programs. An audit can produce up to 10 percent savings without any capital investment. Eventually, the Energy Co-op will finance the purchase and installation of a range of technology from efficient lighting systems and cooling systems to fuel cells, microturbines and other alternative energy supply systems. The Co-op's neighborhood-based operations will run programs that encourage residents to reduce their energy consumption. The Energy Cooperative, working with local community organizations, will offer bulk discounts on energy-efficient appliances, high-efficiency lighting, and air conditioning systems.

CNT will incubate the Co-op until it is spun off as an independent entity. The Co-op will be governed by its membership who also will allocate community funds. The Association of Illinois Electric Cooperatives and other national co-op organizations are providing technical and organizational assistance to the Energy Co-op.

## **Possible Tribal Cooperative Scenarios**

# A Wired Cooperative (A Focus on Traditional Utility Operations)

Historically, electric cooperatives have provided electricity service to customers using the local or regional electric grid. Some electric cooperatives are involved in all phases of electricity supply, including power generation, electricity transmission, electricity distribution, meter reading, and billing. Most electric cooperatives, however, do not generate power or operate transmission lines, focusing instead on the operation and maintenance of local distribution lines, meter reading, and billing.

Many Tribes across the country are now evaluating the merits of forming Tribally-managed electric cooperatives to serve Tribal and non-Tribal accounts on reservations. The following is a brief summary of the various components that could be considered in a Tribal energy cooperative in Southern California focusing on traditional electric utility operations:<sup>3</sup>

Electricity Generation — Electric power generation in California and many other areas of the country has been opened to competition. Tribes in Southern California have a number of options in which to participate in the production of electricity on Tribal lands. While the coal-fired facility at Fort Mohave has been operational for some time, other Southern California Tribes may be candidates for hosting merchant power plants serving the region, particularly those Tribes that are situated near the intersection of large capacity natural gas pipelines (primarily in the natural gas pipeline corridors that follow I-8 and I-40) and electric transmission lines with excess carrying capacity. Other resources that Southern California Tribes can consider developing are low-head hydro, wind energy, and biomass/waste resources. Tribes may partner with independent power producers (IPPs) who may assume turnkey design, construction, operation, and marketing responsibilities for a facility in exchange for tax advantages and production-related royalties paid to the Tribe.

Electricity Transmission — Inter-state and intra-state transmission lines are extremely important components of the electric grid. Since redundancy of transmission lines by competing entities is generally not desirable, their ownership and operations will remain regulated for the foreseeable future. Although Tribes could vie to own and operate some transmission assets, most Tribal lands in Southern California are relatively small and the transmission grid relatively vast, limiting Tribal involvement in this area. Tribes should, however, evaluate the status of previously negotiated right-of-way agreements for electric transmission lines that cross their lands, as many agreements negotiated with Tribes or the Bureau of Indian Affairs 30 to 50 years ago have since expired and should be renewed.

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<sup>&</sup>lt;sup>3</sup> When evaluating the merits of forming an electricity cooperative, SCTCA Tribes should also consider the relevance of or synergies with other energy distribution systems such as natural gas and propane.

*Electricity Distribution* — Like electric transmission, electric distribution lines and related assets are important components of the electric grid and will remain regulated for the foreseeable future. However, unlike electric transmission assets, electric distribution assets are situated locally and are intended to serve local electricity customers and may present an opportunity for Tribal involvement by SCTCA Tribes. SCTCA Tribes, unilaterally or jointly, could negotiate with SDG&E or SCE to purchase their distribution assets and form a distribution-focused electric cooperative. Commensurately, the Tribe(s) would need to develop capabilities to manage the cooperative, operate and maintain distribution lines and substations, and conduct meter reading and billing functions. Ownership, operation, and maintenance of electric distribution assets on Tribal lands are certainly not unprecedented. <sup>4</sup>

The main difference between Tribal electric distribution companies elsewhere and the scenario in Southern California is a matter of geography; Tribal electric distribution companies elsewhere operate within the boundaries of singular sovereign nations that are contiguous; a distribution electric company formed by SCTCA members would serve multiple sovereign nations that are not contiguous (in fact, quite spread out).

# A Wireless Cooperative (A Focus on New Services and Technologies)

In lieu of pursuing the acquisition of distribution assets (power lines, poles, meters, etc.) from SDG&E or SCE, SCTCA Tribes could pursue a number of wireless cooperative initiatives that may reduce the cost of and/or improve the quality of electricity service on their lands. The following is a brief summary of the various components that could be considered in a Tribal energy cooperative in Southern California focusing on innovative electricity services:

Load Aggregation — Two or more SCTCA Tribes could aggregate part or all of their electricity loads to seek better pricing from ESPs operating in the State. When retail choice was originally proposed for California electricity customers, it was widely believed that electricity prices would, to some extent, be reduced due to competition. Given today s relatively tight electricity market in California, individual electricity accounts are expected to find only marginal rate savings (if any) by electricity shopping among ESPs. However, by bundling their electricity loads, SCTCA member Tribes may collectively have a usage level that is significant enough to interest ESPs in further rate reductions. Particularly attractive to ESPs are Tribal gaming operations whose electricity loads are both significant and well shaped (they are 24/7 operations with a high load factor). A Tribal cooperative could also aggregate its loads with other cooperatives in California, thus achieving an even larger aggregation.

<sup>&</sup>lt;sup>4</sup> Examples of operating Triball y-owned electric distribution companies include the Navajo Tribal Utility Authority, the Tohono O odham Tribal Utility Authority (Arizona), Mission Valley Electric (Salish and Kootenai Tribes, Montana), Chickasaw Utility Authority (Oklahoma). Other Tribes such as the Yakama (Washington) and Fort Peck Assiniboine and Sioux (Montana) are in the exploratory stages of forming electric distribution companies on their lands.

*Energy Efficiency Services* — A SCTCA cooperative may provide tailored assistance to member Tribes to improve the operating performance of Tribal buildings, including casinos and other commercial buildings, administration buildings and other institutional facilities, and Tribal housing. Examples of such assistance could be conducting building energy audits and analyses and delivery of low-income services such as the CARE program.<sup>5</sup>

**Distributed Generation Services** — A cooperative may offer assistance — both engineering and financial — to member Tribes to pursue installation of new distributed generation equipment that may offer operating cost and reliability advantages over existing grid power.

*Electrification Services* — A cooperative may offer assistance — both engineering and financial — to member Tribes whose lands are not well served by the current electric grid (e.g. Inaja-Cosmit and Cuyapaipe) to pursue installation of new distributed generation equipment that can provide basic electric service for off-grid customers.

*Energy Planning and Education Services* — A Tribal energy cooperative, particularly if it is part of a national cooperative association, can provide its individual members with assistance on energy policy planning, energy project planning and development, and energy-related skill development and training.

## Financing A Tribal Energy Cooperative

A Tribal energy cooperative would be eligible for financing its operations from the USDA s Rural Utilities Service (RUS) Electric Program. RUS makes insured loans and guarantees of loans to non-profit and cooperative associations, public bodies, and other utilities. Insured loans primarily finance the construction of facilities for the distribution of electric power in rural areas. The guaranteed loan program has been expanded and is now available to finance generation, transmission, and distribution facilities in rural areas. RUS maintains a staff of general field representatives stationed around the country. These representatives meet regularly with borrowers to assist in loan applications and provide assistance as requested. Borrowers also have access to RUS headquarters staff when required.

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<sup>&</sup>lt;sup>5</sup> AB 1890 Section 382 requires that utilities continue to fund programs provided to low-income electricity customers, including, but not limited to, the California Alternative Rates for Energy (CARE) program, which provides discounts for low-income individuals and residences. The CPUC requires each utility to identify a separate rate component, a "public goods charge" (PGC), to collect the revenues used to fund CARE and the public goods programs. The PGC is a nonbypassable element of the local distribution service and collected on the basis of power usage. Funding is set at not less than 1996 authorized levels based on an assessment of customer need.

<sup>&</sup>lt;sup>6</sup> RUS is a primary lending source for the Navajo Tribal Utility Authority (NTUA) and Tohono O odham Utility Authority.

The RUS Electric Program has 2 basic loan offerings:

- 1. *Hardship Rate (5 percent)* The RUS Administrator shall make an insured electric loan for eligible purposes at the hardship rate of 5 percent to a borrower primarily engaged in providing retail electric service if the borrower meets both the rate disparity test and the consumer income test or the extremely high rates test alone. The borrower meets the rate disparity test if its average revenue per kWh sold is not less than 120 percent of the average revenue per kWh by all electric utilities in the stat in which the borrower provides service. RUS will assist in determining whether a borrower meets this test. The borrower meets the consumer income test if either the average per capita income of the residents receiving electric service from the borrower is less than the average per capita income of the residents of the state in which the borrower provides service. The borrower meets the extremely high rates test when their residential revenue exceeds 15 cents per kWh sold.
- 2. *Municipal Rate (Capped and Uncapped)* Municipal rate loans bear interest at a single rate for the interest rate term. RUS publishes a schedule of interest rates for municipal rate loans in the Federal Register at the beginning of each calendar quarter. The current rate is about 5.8 percent (and generally will not exceed 7 percent) for up to 35 years.

RUS also has a memo of understanding (MOU) with the National Rural Utilities Cooperative Finance Corporation (CFC) to pursue projects in Indian Country. CFC is an independent entity that supplements the credit programs of RUS. CFC provides financial and business management services to cooperative owners that consist of distribution systems, power supply systems, and service organizations. A few of CFC s financial products and services are:

- Cost of Service Studies
- Testimony and FERC-related Services
- Financial Management Software
- Equipment Financing
- Short Term and Long Term (up to 35 years) Loans
- Loan Guarantees

### Relationship to NRECA

A Tribal energy cooperative, like many rural electric cooperatives around the country, may benefit from a relationship with the National Rural Electric Cooperatives Association (NRECA). NRECA is the national service organization dedicated to representing the national interests of consumer-owned cooperative electric utilities and the consumers they serve. Approximately 900 NRECA members are electric distribution systems and 60 members are generation and transmission cooperatives. Membership is also available to regional trade and service associations. The guiding principles of NRECA are:

**Voluntary and Open Membership** — Cooperatives are voluntary organizations, open to all persons to use their services and willing to accept responsibilities of membership, without discrimination.

**Democratic Member Control** — Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. The elected representatives are accountable to the membership.

*Members Economic Participation* — Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative, while other parts are directed to members on a proportional basis.

**Autonomy and Independence** — Cooperatives are autonomous, self-help organizations controlled by their members.

*Education, Training, and Information* — Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute to the development of the cooperative.

*Cooperation among Cooperatives* — Cooperatives serve their members most effectively by working together through national and regional structures.

*Concern for Community* — While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.

# Decision Making and Required Actions: Go/No Go Decision on Cooperative Formation

SCTCA Tribes must decide on whether an energy cooperative is in their collective best interests. If the general merits of forming an energy cooperative are compelling and the decision is a GO to proceed with forming a cooperative, then a series of actions will be required:

**Decide on the Priority Components of the Cooperative** — First and foremost, SCTCA Tribes must decide early in the implementation process what cooperative components are to be pursued: components that focuses on traditional utility operations (a wired cooperative); components that focuses on new services and technologies (a wireless cooperative); or components from both scenarios.

Establish Organizational and Management Structure — Preliminary discussions among SCTCA members have suggested that any cooperative would be organized as a non-profit corporation through a filing with the State of California or by chartering the cooperative as a Tribal organization under the Code of Federal Regulations. The existing SCTCA Board could exercise authority over the cooperative, or a separate board may be established. During the formation and start-up stages of the cooperative, an advisory committee could function as an information gathering and analytical resource in support of the cooperative s board.7

Identify Funding/Financing Sources — Some funding sources have already been identified to assist SCTCA in the planning and startup of an energy cooperative. Other potential startup funding sources for startup may include the Administration for Native Americans and the US Department of Energy. Given their history and focus on financing energy cooperatives, RUS and CFC are likely candidates for providing long term financing of the cooperative. To apply for startup funding assistance or long term financing from these organizations, a detailed prospectus will need to be developed that will demonstrate the financial viability of the cooperative under varying financing and operating revenue scenarios.

Familiarization with Technologies/Policies/Regulations — The cooperative should seek out or self-initiate a continuing-ed-like series of informative sessions that address energy technologies, policies, and regulations for the benefit of management (e.g. chairman s office, Tribal council, Tribal planners, casino GMs, cooperative staff, etc.) and technical personnel (e.g. facility managers, public works directors, cooperative staff, etc.).

<sup>8</sup> SCTCA has applied for and is anticipating a grant of approximately \$30,000 from USDA via the University of California, a \$12,000 repayable loan from the CFC and Plumas Sierra Rural Electric Cooperative, and other funds from the Energy Commission and the CPUC s Education Trust.

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<sup>&</sup>lt;sup>7</sup> Representatives from the National Rural Electric Cooperatives Association, California Energy Commission, the California Electrical Users Cooperative, The Heritage Institute, and others have committed to assist SCTCA in an advisory role.

Obtain Detailed Load Info for SCTCA Tribal Energy Accounts — While some data has been gathered, a detailed summary of energy consumption and demand should be compiled for each Tribe that belongs to the cooperative. The summary would include energy, demand, and rate information of major Tribal energy accounts (e.g. casinos, administration buildings, community centers, etc.). This data would be assist in prioritizing activities that deal with load aggregation, energy efficiency, and self-generation.

**Develop a Business Plan** — From information derived from the actions discussed above, a SCTCA Energy Cooperative Business Plan should be developed. The purpose of the Business Plan would be two fold:

- q To summarize and echo back to SCTCA Tribes and the managing board of the cooperative the results from the cooperative planning actions (focus and strategies of the cooperative, organizational and management structure, financial prospectus, etc.)
- q To provide the cooperative with a document that would allow it to communicate with potential outside partners as it pursues start-up or implementation funding from State or Federal sources and long term business financing from entities such as RUS or CFC.

If the decision to proceed with forming a cooperative is a **No Go**, individual SCTCA Tribes may still be positioned to unilaterally pursue certain components of an energy cooperative.